

#### T-1 3/4 (5mm) SOLID STATE LAMP

L-53SRC-E

SUPER BRIGHT RED

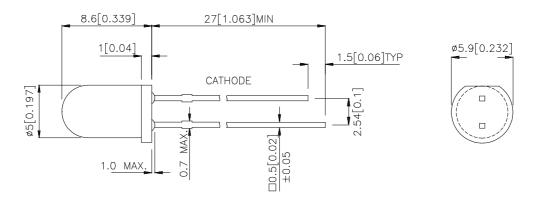
#### **Features**

- •LOW POWER CONSUMPTION.
- ●POPULAR T-1 3/4 DIAMETER PACKAGE.
- •GENERAL PURPOSE LEADS.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •AVAILABLE ON TAPE AND REEL.
- •ROHS COMPLIANT.

#### **Description**

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

### **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25(0.01") unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAB9437 REV NO: V.4 DAT
APPROVED: J. Lu CHECKED: Allen Liu DRA

DATE: NOV/24/2004 PAGE: 1 OF 3

DRAWN: B.H.LI

# Kingbright

#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
		,.	Min.	Тур.	201/2
L-53SRC-E	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	1800	2800	30°

### Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	IF=20mA
λD	Dominate Wavelength	Super Bright Red	640		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	IF=20mA
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Red	1.85	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Red		10	uA	VR = 5V

### Absolute Maximum Ratings at Ta=25°C

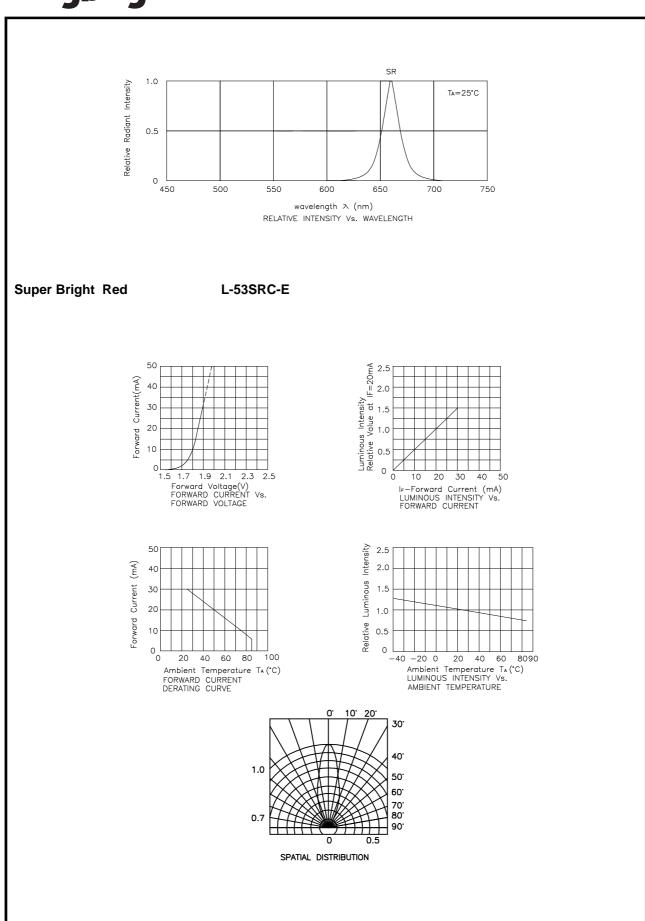
Parameter	Super Bright Red	Units		
Power dissipation	100	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	155	mA		
Reverse Voltage	5	V		
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2] 260°C For 3 Seconds				
Lead Solder Temperature [3]	260°C For 5 Seconds	260°C For 5 Seconds		

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
   3. 5mm below package base.

SPEC NO: DSAB9437 **REV NO: V.4** DATE: NOV/24/2004 PAGE: 2 OF 3 APPROVED: J. Lu CHECKED: Allen Liu DRAWN: B.H.LI

<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

# **Kingbright**



SPEC NO: DSAB9437 REV NO: V.4 DATE: NOV/24/2004 PAGE: 3 OF 3
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: B.H.LI